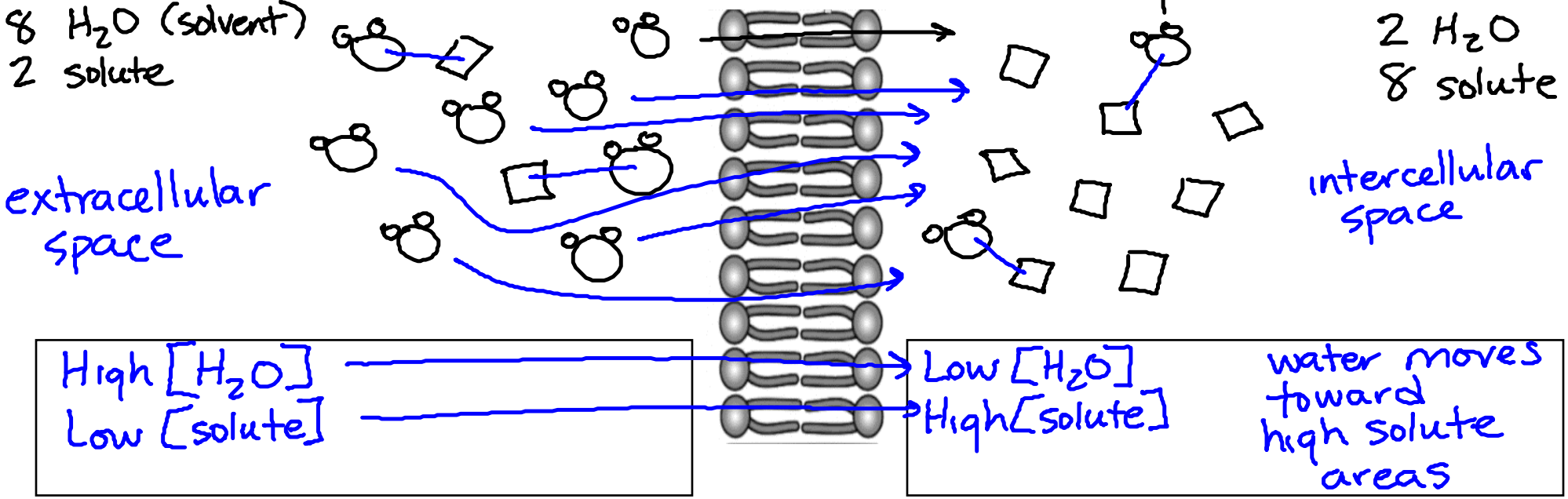
Osmosis Notes

Osmosis diffusion of free H_2O across cell membrane

Occurs because a concentration gradient of solute (salt, sugar, ions) across membrane & water attracted to higher solute side



Examples

- Saline (IV) solution equal salt content to blood - to keep blood cells healthy & constant
- Drinking ocean water higher salt content - dehydrates & kills
- Mummification higher salt covering - dehydrates body, preserve body
- Beef jerky prepared w/ lots of salt - dehydrates & preserves meat
- Salt on slugs higher salts dries out slugs cells - shrivels & dies
- Salt water fish in a freshwater tank lower salt content outside → water rushes into fish's cells → burst

In **osmosis**, water travels toward higher solute areas

Osmosis is passive transport: water diffuses down its own conc. gradient

3 Osmosis Environments:

Environment name	Hypertonic	Hypotonic	Isotonic
Solute concentration outside cell			
Direction of water diffusion			
Cell change			
Diagram (choose 1)			
Example(s)			